ABSTRACT

[00078] A device is provided, having an anode, a cathode, and a first organic layer disposed between the anode and the cathode. The first organic layer produces phosphorescent emission when a voltage is applied between the anode and the cathode. An organic enhancement layer disposed between the first organic layer and the cathode is also provided. The organic enhancement layer is in direct contact with the first organic layer. The organic enhancement layer may comprise a material of structure (I):

$$\begin{bmatrix} A & N & M-Zy \\ R_6 & O & R_3 \\ R_5 & R_4 & X \end{bmatrix}$$

The material of structure I is thermally stable and is a high energy band gap material.